

### **Category #9:**

The guidelines do not adequately address ingredients that may be potential carcinogens, teratogens, mutagens or endocrine disrupters.

### **State Response:**

The OGS guidelines state that products cannot contain any ingredients that are carcinogens or teratogens (reproductive toxicants). Carcinogens are defined as those chemicals listed as known, probable, or possible human carcinogens by the International Agency for Research on Cancer, the National Toxicology Program, the U.S. Environmental Protection Agency, or the Occupational Health and Safety Administration. Chemicals that cause cancer or reproductive toxicity are defined as those listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (California Code of Regulations, Title 22, Division 2, Subdivision 1, Chapter 3, Sections 1200, et seq.). When Green Seal developed these criteria, two somewhat common ingredients in cleaning products, alkylphenol ethoxylates (APEs) and dibutyl phthalate, were identified as potential endocrine disrupters and prohibited as ingredients. In addition, the APEs do not readily biodegrade and are persistent in the environment. Nonylphenol ethoxylate is one of the APEs, and is therefore prohibited.

A November 2004 staff working document of the Council of the European Union ([register.consilium.eu.int/pdf/en/04/st14/st14341.en04.pdf](http://register.consilium.eu.int/pdf/en/04/st14/st14341.en04.pdf)) lists diethyl phthalate (DEP) as a substance with evidence on endocrine disruption. Although DEP is not specifically prohibited by the OGS Guidelines or GS-37, products currently certified by Green Seal and Environmental Choice do not contain DEP as an ingredient.

OGS will support a review and revision of the Guidelines to see if mutagens and endocrine disrupters can be more systematically addressed while still allowing for reasonable variety and innovation in the market.

### **Frequently Asked Public Comment:**

Potential Carcinogens, Teratogens, Mutagens, Endocrine and Hormone Disruptors Not Adequately Addressed: (Endocrine Disruptors); (No Human Carcinogens, Mutagens, Teratogens or Endocrine Disruptors)

--The OGS/Green Seal guidelines do not adequately address ingredients that may be potential carcinogens, teratogens, mutagens, endocrine and hormone disruptors.  
(Deirdre Imus, Founder and President, The Deirdre Imus Environmental Center for Pediatric Oncology, Hackensack University Medical Center, The David Joseph Jurist Research Center For Tomorrows Children, Hackensack, NJ 07601)

--The guidelines should not permit known endocrine disruptors.

In the 1990s, scientists identified a group of chemicals which appeared to interfere with the endocrine system regulating growth and development of animals and humans. Since that time, endocrine disrupting chemicals have become the subject of intense scientific scrutiny; they have been linked to abnormal sexual development in aquatic animals, and are thought to play a role in early puberty, male reproductive problems and possibly in the development of breast and other cancers.

One of the known endocrine disrupting chemicals, dibutyl phthalate, is prohibited by the GS-37 Standard, while another, diethyl phthalate, also commonly found in commercial cleaning products, is permitted.

We recommend that within Section II "Characteristics of Green Cleaning Products" the sub-paragraph 13 which lists prohibited ingredients be amended to include diethyl phthalate. As emerging science continues to identify these and other compounds which similarly interfere with normal development, these should be added to the list of prohibited chemicals.

(Patricia J. Wood, Executive Director, Grassroots Environmental Education, Port Washington, New York)

--Must be free of any known human carcinogens, mutagens, teratogens and endocrine disruptors. (Apply to Tier I Products)

(Deirdre Imus, Founder and President, The Deirdre Imus Environmental Center for Pediatric Oncology, Hackensack University Medical Center, The David Joseph Jurist Research Center For Tomorrows Children, Hackensack, NJ 07601)

--I would just like to voice my opinions on cleaning supply alternatives in schools. Most importantly, prohibiting known endocrine disrupting chemicals, like diethyl phthalate, from being applied in schools would reduce the abnormal development in kids.

(Alexandra Markiewicz, Vanderbilt University, Lives in Manlius, NY)

--I am writing to show my support for using greener cleaning products in our schools. I believe that prohibiting endocrine disrupting chemicals and volatile organic compounds from being used by schools for cleaning should be a no brainer. These are kids we are talking about, and every effort should be made to keep harmful chemicals away from them.

(Dorothy Kraebel, Cato, NY)

--No cleaning product contain any asthmagens as listed on OPEC Exposure Codes.

(<http://www.aoec.org/aoeccode.htm>) Since the goal of the legislation is to minimize adverse impacts on children's health and the environment, no cleaning product containing an asthmagen should be introduced into the school environment. For example, the State of Massachusetts' rejected any cleaning product that included monoethanolamine, an asthmagen listed on the OPEC Exposure Code <http://www.aoec.org/aoeccode.htm>. There is no justification in allowing asthmagens in schools. OGS needs to follow Massachusetts lead and eliminate asthmagens.

(Dr. Daniel Lefkowitz, Yorktown Heights, NY)

--The guidelines should not permit known endocrine disruptors. In the 1990s, scientists identified a group of chemicals that appeared to interfere with the endocrine system regulating growth and development of animals and humans. Since that time, endocrine disrupting chemicals have become the subject of intense scientific scrutiny; they have been linked to abnormal sexual development in aquatic animals, and are thought to play a role in early puberty, male reproductive problems and possibly in the development of breast and other cancers. One of the known endocrine disrupting chemicals, dibutyl phthalate, is prohibited by the GS-37 Standard, while another, diethyl phthalate, also commonly found in commercial cleaning products, is permitted. I am recommending that within Section II "Characteristics of Green Cleaning Products" the sub-paragraph 13 that lists prohibited ingredients be amended to include all phthalates. As emerging science continues to identify these and other compounds which similarly interfere with normal development, these should be added to the list of prohibited chemicals.

(Dr. Daniel Lefkowitz, Yorktown Heights, NY)

--Under Section II: Characteristics of Green Cleaning Products

13. Add to list:

- "diethyl phthalate" – an endocrine disrupter as noted in scientific publications, including The Relationship between Environmental Exposures to Phthalates and DNA Damage in Human Sperm Using the Neutral Comet Assay Duty, SM, NP Singh et al., Environmental Health Perspectives, July 2003.

(Katherine Kelleher of (NYSUT) NYS United Teachers)

--It has come to my attention that cleaning products in many of our schools need to be improved for a safer environment in the future for our children. I fully support the implementation of green cleaning products due to the fact that many of the cleaning products used contain endocrine disrupting chemicals linked to

reproductive disorders and cancer related illnesses. I support the prohibition of chemicals such as diethyl phthalate also the use of volatile organic compounds exceeding 1% for other health related reasons. Why should our children who are in critical stages of development be subject to chemicals linked to these effects when we have access to safer, organic alternatives? I urge you to stand behind the implementation of safer cleaning supplies in our schools, as I plan to use in my home.

(Sarah Reding, Auburn, NY)

--Equally important, procurement standards and specifications must be based on the best science available. This becomes a challenging task when there are many uncertainties related to the health and environmental effects of chemicals. While Green Seal takes a precautionary approach to these effects, we believe it is necessary to use accepted test methods and classifications in product environmental standards. For example, in developing our standard for floor-care products, GS-40, we sought a definition of asthmagens and endocrine disruptors that we could use to prohibit chemicals with these properties in these products. We could find none, and therefore in the standard we could only specify by name several chemicals commonly used in these products which are known to have asthmagenic or endocrine-disrupting properties. Any prohibition the State specifies will have scientific value only if there is an objective way to determine what falls under the prohibition.

(Arthur B. Weissman, Ph.D., President and CEO, Green Seal, Inc., Washington, D.C.)

--For specifications regarding Characteristics Of Green Cleaning Products, (Section II of the proposal), we urge that the following additional criteria be added\*:

The list of prohibited ingredients (item 13) should include “diethyl phthalate”, a known endocrine disrupter in addition to other phthalates identified by Green Seal or Environmental Choice.

\* See Healthy Schools Network’s Guide to Healthier Cleaning and Maintenance: Practices and Policies for Schools, page 5.

(Stephen J. Boese, New York State Director, Healthy Schools Network, American Academy of Pediatrics, Dist. II, American Lung Association of NYC, American Lung Association of NYS, The Association of New York City Education Councils, Campaign for Healthy Children, Citizens Environmental Coalition, Citizens For A Clean Environment, Community Health and Environment Coalition, Environmental Advocates of NY, For a Better Bronx, Grassroots Environmental Education, INFORM, Inc., Learning Disabilities Association of NYS, Learning Disabilities Association WNY, National Resources Defense Council, NEA of New York, New York Committee for Occupational Health and Safety, Toxic Waste Lupus Coalition, WEACT for Environmental Justice, Wellness in the Schools Inc., Jacquelyn Kamin, Community Affairs Director of Opportunity Charter School, Philip J. Landrigan, MD, MSc, Professor and Chairman of Department of Community & Preventive Medicine Mount Sinai School of Medicine, Connecticut Foundation for Environmentally Safe Schools, Health Schools Campaign, Chicago IL, Healthy Children Organizing Project, San Francisco, Ca., and NEA Healthy Schools Caucus)